

**DEALING WITH  
ATTENTION DEFICIT/HYPERACTIVITY DISORDER  
IN THE EMERGENCY SERVICES**

EXECUTIVE LEADERSHIP

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**ABSTRACT**

Attention Deficit/Hyperactivity Disorder (ADHD) is a condition characterized by impulsivity, distractibility, and hyperactivity. It affects 2.1 - 3.5 percent of adults in the general population, but many of the characteristics of people with ADHD are also found in members of fire and rescue departments. The nature of the problem is that fire and EMS managers are not typically trained to deal with employees with ADHD, even though it is considered a disability under the Americans With Disabilities Act and must be handled appropriately.

The purpose of this study was to identify some effective ways to deal with members of the emergency services who have ADHD. Using descriptive and evaluative research methodologies, two literature searches and a survey were conducted to address the following questions:

1. What is Attention Deficit/Hyperactivity Disorder (ADHD)?
2. How prevalent is ADHD in the emergency services?
3. How might the characteristics of ADHD affect a member's work performance within an emergency services organization?
4. How can a manager best deal with a member with ADHD to maximize positive outcomes for the individual and the department?

The research verified that a significantly greater percentage of fire and EMS workers -- five to six times that of the general population -- have the characteristics of ADHD. The research also identified some areas of the emergency service work environment that are affected by the characteristics of ADHD, and how these characteristics can affect work performance. Finally, some strategies for successful management of ADHD in the workplace were identified.

Based on the research, several recommendations were made regarding effective ways of dealing with fire and EMS employees who exhibit the characteristics of ADHD. These recommendations were broken down into areas relating to managers, supervisors/co-workers, and instructors to help make the implementation and application of these techniques easier.

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## **INTRODUCTION**

Many fire departments and emergency medical service (EMS) departments across the country have members who are very talented in their jobs, yet are impulsive, distractible, and have trouble sitting still. Some of these members react quickly and appropriately to many situations, yet may be labeled as whiners or complainers. Often, they can focus on many things at once, yet can not seem to finish individual tasks or projects. These individuals may seem to have the potential to be excellent -- perhaps model -- members of the organization, yet at the same time they may be having difficulty in simply keeping their job. These employees may have a condition known as Attention Deficit/Hyperactivity Disorder (ADHD).

Fire and EMS managers are faced with a difficult job. They must maintain an effective and efficient work force, and provide opportunities for personal and professional development for all members. At the same time, they must ensure that all members follow the same rules and act appropriately in all situations, and do not detract from the efficiency or effectiveness of themselves or others. Similarly, these managers must ensure all appropriate laws, regulations, and standards are followed, including the Americans with Disabilities Act (ADA). Finally, these managers may themselves exhibit some of the characteristics mentioned above, which could inhibit their ability to successfully perform some of these tasks.

The nature of the problem is that fire and EMS managers are not typically trained to deal with members who have ADHD. The results of inappropriate action on the part of a manager could include an ineffective and inefficient workplace, loss of a valuable member (the member or the manager), violation of the ADA (which recognizes ADHD as a disability), and extreme frustration for other managers, instructors, and members. On the other hand, taking appropriate measures with/for these members can result in a more productive workplace, higher morale, more effective training, and ensured compliance with the ADA.

The purpose of this study was to determine some effective ways for fire and EMS managers to recognize and make appropriate accommodations for members of the emergency services who have ADHD. Through an exhaustive literature search, internet search, and survey, both descriptive and evaluative research methodologies were used to research the following questions:

1. What is Attention Deficit/Hyperactivity Disorder (ADHD)?
2. How prevalent is ADHD in the emergency services?
3. How might the characteristics of ADHD affect a member's work performance within an emergency services organization?
4. How can a manager best deal with a member with ADHD to maximize positive outcomes for the individual and the department?

## **BACKGROUND AND SIGNIFICANCE**

ADHD is a neurobiological condition characterized by inattention, impulsivity, and in some cases, hyperactivity. ADHD is found in approximately three to five percent of all American children, seventy percent of whom continue to have symptoms into adulthood (C.H.A.D.D., 1995, p. 1). Adults with ADHD experience problems at work and in relationships and often exhibit emotional difficulties. Most adults with ADHD are restless, easily distracted, have difficulty sustaining attention and concentrating, are impulsive and impatient, have frequent mood swings and short tempers, are disorganized and fail to plan ahead.

ADHD in adults was not officially recognized by the medical and psychiatric community until recently. Many adults with ADHD were never diagnosed as children, and

thus are not aware of the consequences of their disability. This may have lead to low self-esteem, increased frustration, and educational and/or vocational failure. Many others may have been misdiagnosed, and may have been treated for depression, antisocial personality, or character disorders. Such a misdiagnosis might have prevented the individual from obtaining a job in a field they could succeed in.

Adults with ADHD often experience career problems. They may lose their job due to poor performance, attention or organizational difficulties, or relationship difficulties. In other cases, they may quit out of boredom, even if they seem to be on the road to a long, successful career. On the other hand, adults who learn to adapt to their disability often are very successful. Many learn to utilize the energy and creativity that often accompanies ADHD to reach goals for themselves and their employer. Examples of successful people with ADHD symptoms include Benjamin Franklin, Thomas Edison, and Albert Einstein.

The potential impact -- positive and negative -- that a member with ADHD can have on an emergency service organization is clear. The potential negative affect on the individual is also evident. Emergency service managers must be willing to understand the characteristics of a member with ADHD and how to exploit these in a manner that will benefit the organization and provide an avenue of success for the member. Similarly, if it is the manager that exhibits the symptoms of ADHD, he/she must understand how to adapt to their work environment and relationships to ensure continued vocational success.

The topic of dealing with ADHD in the emergency services is certainly germane to the *Executive Leadership* course in the Executive Fire Officer Program. The course spent a considerable amount of time on self-assessment and observer-based assessment; these are key to the recognition and eventual diagnosis of ADHD. Course units included dealing with multiple

roles, creativity, decision-making, managing change, and other topics which will benefit the manager when dealing with a member who has ADHD. Topics of discussion during the course, including human resource management, management of training/education programs, and personal/ professional relationships are also closely related to this study.

## **LITERATURE REVIEW**

An annotated bibliographic search conducted at the National Emergency Training Center's Learning Resource Center on ADHD in the emergency services produced only two documents on the subject of ADHD -- one EFOP Applied Research Project and a video journal segment. As a result, a literature review outside the typical EFOP arenas had to be conducted. Research reports, books, articles, and internet sites dealing with ADHD in adults and in children were consulted. Later, I was able to obtain some emergency service literature that did not mention ADHD specifically, but had information germane to the topic.

In this review, it was important to first define ADHD to ensure that all conclusions were based on the same definition. Cohen (1997) stated that it is a neurological syndrome that is usually genetically transmitted. In Perry's interview (1997), Cohen described it by using the behavioral characteristics of impulsivity, hyperactivity, and distractibility. Hallowell and Ratey (1994, p. 3) described it as being characterized by distractibility, impulsivity, and restlessness. Ingersoll (1988) felt that few professionals outside the mental health profession really understand the term. She explained:

The confusion has been compounded by the bewildering variety of terms used over the years to describe the condition -- terms such as "minimal brain damage" or "minimal brain dysfunction" (often called MBD), "hyperkinesis," "hyperkinetic reaction," and "hyperactivity." These changes in terms reflect changes in thinking about the nature of

the disorder itself. Thus, the term “minimal brain damage” gave way to the labels “hyperkinetic” and “hyperactive,” which were replaced, in turn, by the term “Attention Deficit Disorder” and, most recently, “Attention Deficit Hyperactivity Disorder (ADHD) (Ingersoll, 1988, p. 3).

As a means of encouragement to the adult ADHD sufferer, Hallowell and Ratey described ADHD in a less scientific and more personal way:

Remember that what you have is a neuropsychiatric condition. It is genetically transmitted. It is caused by biology, by how your brain is wired. It is NOT a disease of will, nor a moral failing. It is NOT caused by a weakness in character, nor by a failure to mature. Its cure is not to be found in the power of will, nor in sacrifice, nor in pain (Hallowell and Ratey, 1992, p. 2).

Current guidelines for diagnosing ADHD are outlined in the Diagnostic and Statistical Manual, Fourth Edition (DSM-IV), published by the American Psychiatric Association (1996). This manual represents an attempt to standardize diagnostic practices among professionals who diagnose psychiatric disorders, and provide a common language for mental health professionals engaged in clinical practice and research.

The prevalence of ADHD in the emergency services was researched by Cohen (1997), who stated that 18.5 percent of the fire and EMS personnel he surveyed in his department meet the criteria for ADHD (Perry, 1997). This was further explained, along with a statistical analysis, in Cohen (1997). In comparison, ADHD in the general population affects between two and five million adults (C.H.A.D.D., 1995), or about 4.8 percent of all adults (Perry, 1997). In the video segment, Cohen (1996) stated that he and other professionals think that ADHD is more common in the public service industries.

While the literature search turned up articles which discussed several ADHD traits and characteristics among emergency service personnel (Schamadan, 1997; Mack, 1991), none discussed prevalence of these traits or specifically mentioned ADHD. In the video segment on Adult ADHD, Cohen (1996) felt that "Some of the characteristics of people with ADHD seem to have them migrate toward careers in EMS or public safety, whether it be firefighting or police."

According to the literature reviewed, the characteristics of ADHD can affect a member's work performance in a variety of ways. Attitudes and outward appearances range from seeming rude, lazy, or rowdy (Cohen, 1997) to being depressed and quiet (Taylor, 1990). C.H.A.D.D. (1995) identified that "most adults with ADHD are restless, easily distracted, have difficulty sustaining attention and concentrating, are impulsive and impatient, have frequent mood swings and short tempers, are disorganized and fail to plan ahead" (p. 1). Cohen (1996) stated that adults with ADHD -- especially those in the emergency services -- suffer from high rates of divorce, job dissatisfaction, and stress-related diseases. All of these can affect job performance.

Adults with ADHD may be easily distracted, have a short (but very intense) attention span, are typically disorganized, make snap decisions, and have difficulty following directions (Cohen, 1997). They also seem to have "both an exaggerated sense of urgency and an exaggerated sense of boredom" (Cohen, 1997, p. 7). According to Kelly and Ramundo (1997), ADHD work-related behaviors include workaholism, single-mindedness, procrastination, and boredom.

Impulsivity is another characteristic of ADHD that impacts the workplace. Common

traits in this area include risk-taking, poor planning and scheduling, ineffective personal financial management, social problems, and not considering consequences (Cohen, 1997). Blurting out, speaking out of turn and not considering the feelings of others are further examples (Perry, 1997). Cohen (1997) lists additional related deficits including distractibility, mood disturbances, fears, and poor handwriting.

Hyperactivity is another facet of ADHD which has implications in the workplace. Feelings or actions indicating restlessness -- twitching and squirming, for example -- are one indication (Perry, 1997). Nervous habits such as toe or finger tapping, twirling hair, clicking pens, smacking lips and gum, and being overly talkative are other indications of hyperactive behavior (Kelly and Ramundo, 1995). Hyperactivity can lead to failure to follow through with projects, risk-taking and thrill-seeking, impatience, and inability to be detail-oriented (Ingersoll, 1988). Cohen (1996) stated in the video segment that people with ADHD may be drawn to the emergency services because of their drive for thrill-seeking and danger-seeking, as they get to take care of their condition while they are working.

“The issue for hyperactive ADD adults is that much of their activity is dysregulated, random and unproductive” (Kelly and Ramundo, 1995, p. 15). These traits or inattentiveness, impulsivity, and hyperactivity can lead to career difficulties, and adults with ADHD “may lose jobs due to poor job performance, attention and organizational problems, or relationship difficulties. Other times they may simply quit out of boredom” (C.H.A.D.D., 1995, p. 1). The worst case scenario -- suicide -- may be the end of the chain of events brought on by depression and the frustrations often associated with ADHD (Schamadan, 1997 and Cohen, 1997).

The literature suggested many strategies to deal with an employee with ADHD to maximize positive outcomes. Many of these can be applied to the emergency services. In fact,

many *must* be applied. The Americans with Disabilities Act of 1990 (ADA) applies to mental, psychiatric, and emotional disorders as well as physical disabilities (Pear, 1997; Rukavina, 1997; and Schneid, 1997). According to Pear (1997, p. 1):

The law defines disability as “a physical or mental impairment that substantially limits one or more of the major life activities.” But until now, the government focused on physical disabilities and provided few answers to the many questions it received about the law’s meaning for people with psychiatric disorders. Such disabilities may include major depression, bipolar disorder (manic depression), schizophrenia, obsessive-compulsive disorder and personality disorders, the commission said.”

The commission referred to by Pear is the Equal Employment Opportunity Commission, which provided interpretations of the ADA with regard to mental disabilities. The interpretations “are not binding on the courts, [but] they are binding on the EEOC and its investigators and provide exceptional guidance for fire departments (Schneid, 1997, p. 109).

The ADA requires employers to take reasonable steps to accommodate employees and prospective employees with a psychiatric emotional problems (Pear, 1997). The ADA may apply to an employee who is “easily or frequently distracted by irrelevant sights or sounds or if his mind frequently goes ‘blank’” (Schneid, 1997, p. 110). These accommodations may include room dividers or partitions to minimize distractions; soundproofing; providing a “temporary job coach” to assist with training an individual; or a change in work schedules (Pear, 1997). The question of whether a person has a psychiatric disorder is for a medical professional, and “the burden is on the employee to notify the employer that he or she needs an accommodation” (Rukavina, 1997, p. 28).

Strategies to deal with ADHD in the workplace do not have to be accommodations. For

example, structure is the hallmark of the treatment of the ADHD child; it can be equally as useful with ADHD adults. Cohen agreed:

One of the things people with ADHD hate, but need, is structure, so the reason they may do well in the emergency services is that the profession tends to be paramilitary in nature -- everybody wears the same clothes, everybody reports at the same time and everybody follows the same protocols. While that's tough for people with ADHD, it's absolutely necessary and paves the way for their success (Perry, 1997, p. 64).

Techniques such as color coding, posted goals and objectives, and clearly identified deadlines can be used to establish this external structure (Hallowell and Ratey, 1992). Other techniques were discussed by Hallowell and Ratey (1992); these ranged from insight and education on ADHD to performance management (such as using structure) to mood management tips. C.H.A.D.D. (1995) recommended the use of an appointment book, listing daily tasks, learning time management skills, and setting up a self-reward system (p. 1).

Kelly and Ramundo (1997) was full of real life situations faced by persons with ADHD, each with a paragraph explaining "A Way Around It." One chapter was dedicated to workplace situations. Some of the success methodologies suggested in this book included multi-tasking (having several projects going at one time); requiring the individual to work with a team; working flexible hours and/or freedom to have a unique working style; letting them organize their own work space; and even helping them identify a better career path (Kelly and Ramundo, 1997).

In Perry (1997), Cohen discussed the ADHD firefighter/EMS provider in the training setting. He stated that training methods may need to be modified to use more multisensory

training and nontraditional training methods. He added that the instructor may identify an adult who exhibits some of the characteristics of ADHD, as in the case where the student obviously knows the material very well but can't pass the test or fails to get a license application in on time (Cohen, 1996). Cohen stressed that the instructor should be knowledgeable enough about ADHD to assist the student in accessing help (Perry, 1997). He further emphasized in the video segment that instructors and leaders who see members with signs and symptoms of ADHD should not try to diagnose them, but rather must refer these people to professionals (Cohen, 1996). Ingersoll (1988) and Taylor (1990) had tips for teachers working with children with ADHD; some of these concepts can be adapted to the emergency service training environment.

Cohen (1997) identified that the best positions in a fire or EMS department for people with ADHD include any position where they can be a field provider or a field supervisor. They also make good incident commanders, as they can focus on many things at once. "They'll figure out very quickly that you need 100 stretchers, 30 ambulances and two shelters, but don't ask them to get the supplies!" (Perry, 1997, p. 64). Taylor (1990) came to a similar conclusion, stating that while some adults with ADHD become workaholics, they are usually good ideas persons who can delegate tasks to people who are better at handling details.

Cohen also discussed six things that the ADHD adult can do at home and work to help "de-clutter" their lives. These were:

1. Be specific about what you will change.
2. Focus on one step at a time.
3. Create a system for placing things.
4. Build your tolerance for spaciousness.
5. If you need help, invest in support.

6. Be kind to yourself. Start slow and be appreciative of small gains (p. 28).

Schamadan felt that looking out for each other is also important, and recommended that departments should create a team and a plan to deal with some of the negative affects of ADHD (1997).

The literature reviewed affected the outcome of the research in that all documents provided similar information related to the specific research question being addressed. The limited body of knowledge provided few opportunities for differences of opinion in areas related to ADHD, its prevalence in the fire service, and what can be done to ensure a productive workplace. Perhaps most influential to this paper was Cohen's research, as it specifically related to ADHD in the emergency services. The most practical in terms of assisting the adult with ADHD was Kelly and Ramundo (1997), as it was more practical and less clinical or educational. It presented real-life situations from adults with ADHD and identified ways to successfully deal with each. It also provided a comprehensive list of resources for adults with ADHD as an appendix.

## **PROCEDURES**

This research project was conducted primarily using evaluative research methodology; therefore, a review of available literature was conducted. Few books, articles, or EFOP Applied Research Projects were found that explore the topic of adult ADHD. It was decided that, to be germane to the research questions being asked in response to the identified problem, the literature review would be expanded to include information on ADHD in children.

The literature search was initiated in July, 1997 at the National Emergency Training Center's Learning Resource Center through 1) submission of a literature search request, and 2) a computer search of available fire service trade publications, books, and EFOP Applied

Research Projects. Only two sources were found. A similar literature search was conducted at the Ocala/Marion County Regional Library, where a few books on ADHD were located. A search on the internet using the keyword "Attention Deficit Disorder" identified a few more sources. Appropriate information from each of these sources was documented and categorized according to the research questions previously identified.

Finally, a survey of approximately 96 EFOP students at the National Fire Academy was conducted on July 16, 1997. On this date, there were four separate EFOP-level classes being offered at the National Fire Academy. This provided an opportunity to survey a relatively large group of Executive Fire Officers at one time to determine whether or not they feel that they exhibit any characteristics of ADHD. To further quantify the data collected, the survey also gathered demographic and geographic information about the respondents' departments. A total of 92 EFOP students returned the surveys. Appendix A contains the survey instrument, Appendix B contains the general survey results, and Appendix C contains survey results specific to ADHD.

As inferred above, the literature review was limited only by the constraints intended to make it germane to the research being conducted. There was very little information found initially on the specific topic, so much had to be inferred from related topics (i.e. - ADHD in children; ADHD in adults in the general population, etc.) By contacting Harold Cohen, author of the only other EFOP Applied Research Project on this subject, I was able to obtain a very comprehensive bibliography on adult ADHD. Unfortunately, the Ocala/Marion County Regional Library does not (or would not) participate in the inter-library loan program, so some of the resources that were identified in Cohen's bibliography were unobtainable for the purposes of this research project.

The survey instrument was limited by the fact that the questions were derived from the DSM-IV (APA, 1996). The intent of this diagnostic tool is to assist in the diagnosis of ADHD in children. Not all of the survey questions were applicable to adults; in fact, the research showed that many adults would have overcome or adapted their lifestyles or work habits to compensate for the characteristics in the survey instrument. This could make the results inaccurate. Further, the survey instrument was developed prior to initiating the literature search, and it was only after the survey was conducted that I found in Cohen's research that there is a tool for evaluating adults suspected of having ADHD. Rather than starting over, I elected to stay with the survey I had already conducted, and compare my results to Cohen's.

The survey itself was limited by the fact that it was only given to Executive Fire Officers in attendance at the National Fire Academy in the four EFOP classes on one specific day; this may not be representative of Executive Fire Officers nationwide, or of any particular demographic grouping of fire departments. Further, not all of those EFOP students surveyed returned the survey instrument, and the reason may be specific to the actual reason for the survey. For example, I know of one student who clearly exhibits ADHD characteristics who did not complete the survey because he was "afraid of what it might show."

## **RESULTS**

The purpose of this study was to determine some effective ways for fire and EMS managers to recognize and make appropriate accommodations for members of the emergency services who have ADHD. These areas were addressed in the results of the four research questions. (Survey results are detailed in Appendices B and C).

### **1. What is Attention Deficit/Hyperactivity Disorder (ADHD)?**

ADHD is a neuropsychological disorder that is primarily characterized by distractibility, impulsiveness, and hyperactivity. ADHD is found in approximately three to five percent of all American children, seventy percent of whom continue to have symptoms into adulthood. A true diagnosis can only be made by a medical professional, and is determined by an evaluation based on the American Psychiatric Association's Diagnostic and Statistical Manual, Forth Edition (DSM-IV) (1996).

**2. How prevalent is ADHD in the emergency services?** Cohen's research (1997) showed that 18.5 percent of members surveyed in his department have characteristics consistent with ADHD. This survey was based on adult criteria for ADHD. My survey of students from across the nation enrolled in Executive Fire Officer Program courses in July 1997 showed that approximately 13 percent of those surveyed have characteristics consistent with ADHD (12 out of 92 surveys returned). This survey was based on the DSM-IV evaluation criteria, which is primarily a diagnostic tool for evaluating children suspected of having ADHD. As a comparison, it is estimated that between 2.1 and 3.5 percent of adults in the general population actually have ADHD (C.H.A.D.D., 1995).

The survey conducted as a part of this research is detailed in the Appendices. It showed that 12 out of 92 surveys returned (approximately 13 percent) exhibit characteristics of ADHD. There is no specific rank, department profile, or region of the country that these "positive" surveys represent. Further, the surveys show that ADHD manifests itself in different ways -- some of the respondents showed more impulsivity traits, while others showed more distractibility traits. Five of the respondents have been officially diagnosed as having ADHD.

**3. How might the characteristics of ADHD affect a member's work performance within an emergency services organization?** ADHD affects work performance in different ways for different people. Adults with ADHD may be restless, easily distracted, have difficulty sustaining attention and lose concentration easily. They may be impulsive and impatient, have frequent mood swings and be short tempered. They are often disorganized and fail to plan ahead, and often have difficulty getting along with others. They often fail to follow through with projects, have difficulty being detail-oriented, and get bored easily. They have poor planning skills, especially in the areas of scheduling, finances, and social relationships. They commonly exhibit risk-taking, danger-seeking, or thrill-seeking behavior. Terms often used to describe adults with ADHD include workaholic, single-minded, and procrastinating.

**4. How can a manager best deal with a member with ADHD to maximize positive outcomes for the individual and the department?** The most important strategy for maximizing the potential of members with ADHD is the use of structure -- clearly defined roles, goals and objectives, deadlines, and rules/regulations. Educating the individual and his/her teammates about ADHD is also important. Using time management techniques and the use of an appointment book can add structure and consistency. Training methods should include more multisensory training and nontraditional training methods. There are many individual techniques that can be employed to assist members with ADHD on an individual basis, since each situation is different. What is clear, however, is that ADHD is covered under the Americans With Disabilities Act, and reasonable accommodations must be made by the department should a member with ADHD request it.

## **DISCUSSION**

The literature reviewed and the survey correlated fairly closely. The difference in the percentage of emergency service personnel exhibiting characteristics of ADHD probably results from the limitations of my survey; in particular, the use of a tool typically used to evaluate children. (This limitation was described more thoroughly in the "Procedures" section of this paper.)

The research reviewed and conducted showed a significant difference between the percentage of adults in the general population with ADHD (2.1 - 3.5 percent) and the percentage of emergency service personnel exhibiting characteristics of ADHD (13.0 - 18.5 percent). This is important, as it has major implications for fire and EMS departments across the country. Even though only five respondents (5.4 percent) in the survey conducted for this paper have actually been diagnosed with ADHD, this is approximately double that of the average adult population.

I believe the reason that more people in the emergency services have characteristics associated with ADHD is because of the nature of the disorder. According to the research, some of these characteristics include danger-seeking, risk-taking, and the fact that most fire and EMS departments are para-military in nature with a very structured regimen. The individual with ADHD characteristics will also find an environment that is often fast paced with numerous stimuli occurring at once; this is the type of environment that such an individual can be successful in. Finally, the individual has the possibility of becoming a "hero" -- a chance of being placed in high esteem for something that he does on a sudden, crisis-based, as-needed basis.

The organizational implications are widespread and significant. The requirements

under ADA mandate that employers make reasonable accommodations for individuals with disorders such as ADHD, yet many employers do not realize this. Because of the prevalence of ADHD in the emergency services (as identified in Cohen's and this research), fire and EMS departments need to be aware of this. Further, the emergency service instructor may be in a position to identify someone exhibiting signs or characteristics of ADHD, and can take steps toward the individual's education and treatment of the condition. This can lead to a more successful life for, and more productive work from, the employee.

## **RECOMMENDATIONS**

As stated in the introduction portion of this paper, the nature of the problem is that fire and EMS managers are not typically trained to deal with members who have ADHD. The results of inappropriate action on the part of a manager could include an ineffective and inefficient workplace, loss of a valuable member, violation of the ADA, and extreme frustration for other managers, instructors, and members. On the other hand, taking appropriate measures with/for these members can result in a more productive workplace, higher morale, more effective training, and ensured compliance with the ADA.

The purpose of this study was to determine some effective ways for fire and EMS managers to recognize and make appropriate accommodations for members of the emergency services who have ADHD. Based on this research, many effective techniques were identified. The recommendations are presented below, grouped into specific areas related to managers, supervisors/co-workers, and instructors. This format may help make the implementation and application of these techniques easier for future readers of this paper.

### Managers

Managers need to be educated about ADHD and the impact it can have on their organization. This impact can be positive if approached correctly.

- Become educated about ADHD. One of the most powerful treatments for ADHD is knowing that “the boss(es)” understand the disorder. This can be accomplished through books, internet searches, or talking with professionals or adults with ADHD.
- Understand the treatment modalities for ADHD. Often, the adult with ADHD will be participating in short- or long-term psychotherapy and may be on medication.
- Regard a person’s ADHD symptoms as personality traits, and use them to help determine work settings, station assignments, etc.
- Be encouraging. ADHD adults need lots of encouragement -- they wither without encouragement but light up when given it.
- Understand the ADA, and be willing to make reasonable accommodations for a member who requests it. Recognize that an employee may not know they can request such accommodations, and that a “problem employee” may not realize they have the characteristics of ADHD. Don’t be afraid to ask for help from other professionals, including medical professionals or human resource personnel.

### Supervisors/Co-workers

Supervisors and co-workers have the biggest stake in dealing with the ADHD adult, as they have the most contact with the individual. There are numerous ways the supervisor and co-worker can help make the work environment positive.

- Define expectations in measurable, short-term goals, and offer short-term rewards rather than long-term rewards.
- Create a structured, systems-driven work environment (rather than a people-driven work environment). This helps with organization and self-esteem.

- Develop routines and checklists; establish priorities; and keep assignments small.
- Help create both “distraction-free zones” and work spaces that allow movement.
- Give lots of encouragement and support. Point out what you like and find acceptable in their work. Show them how to apply the “positives” to other aspects of their work.
- Give them special projects needing creativity, flexibility, insight, problem-solving, and risk-taking abilities.
- Be a coach to them, rather than a “boss” or “bully.” Make sure you are approachable and will listen to them objectively, whether they have a problem or are being “creative.” Be understanding if they “blow up” if they are frustrated.

### Instructors

Instructors need to understand what the characteristics of ADHD are, and what to do if a student exhibits the characteristics of ADHD. They must know how to constructively refer them to get assistance, and where such help is available. They must understand some of the classroom environments that will help ensure success for the ADHD student, as well as some instructor characteristics that will be helpful when teaching ADHD adults.

- Classes should have relatively small student-to-instructor ratio, with more individualized instruction. Work periods should be short.
- The class should be structured with an interesting curriculum. Lots of practical application and interaction is important.
- Instructors should be clear when giving directions, and should use lots of positive reinforcement.
- Instructors must be firm and consistent, and should have both patience and a sense of humor.

If the recommendations outlined above are followed, the fire department or EMS

workplace for an adult with ADHD can be very successful. While considered a disability, most adults learn to adapt to the condition as they grow older. Taylor (1990) gave a good account of this:

One mother of an ADHD young adult summarized the gradual blossoming of good adjustment during late adolescence and early adulthood: "The very traits that used to work against him now work for him. He's so aware of how everybody else is doing and how they are feeling. He strikes up conversations and has an easy time making good friends (p. 39).

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## Appendix A

Survey ns rumen



Research Topic Information

For all of the following questions, please check either yes or no. yes no

- 1 Have you ever been diagnosed with Attention Deficit/Hyperactivity Disorder, Attention Deficit Disorder, or related disturbance?
  
- 2 Do you:
  - a. often fail to give close attention to details, or make careless mistakes in schoolwork, work, or other activities?
  
  - b. often have difficulty sustaining attention in tasks or activities?  
  
often not seem to listen to what is being said to you?
  
  - d. often fail to follow through on instructions and fail to finish schoolwork chores, or duties in the workplace (not due to oppositional behavior or failure to understand instructions)?
  
  - e. often have difficulties organizing tasks and activities?  
  
often avoid or strongly dislike tasks (such as schoolwork or homework) that require sustained mental effort?
  
  - g. often lose things necessary for tasks or activities (e.g. assignments pencils, books, tools, or other belongings)?
  
  - h. often easily distracted by extraneous stimuli?  
  
often forgetful in daily activities

yes   no

3. Do you:
- a. often fidget with hands or feet or squirm in seat?
  - b. leave seat in classroom or in other situations in which remaining seated is expected?
  - c. often run about or climb excessively in situations where it is inappropriate, or have feelings of restlessness?
  - d. often have difficulty playing or engaging in leisure activities quietly?
4. Do you:
- a. often blurt out answers to questions before the questions have been completed?
  - b. often have difficulty waiting in lines or awaiting turn in group situations?
5. For those questions you answered "yes" above, did the symptoms generally begin prior to age 7?
- Are the symptoms present in two or more situations (e.g., at school work, and at home)?
- Does the disturbance cause significant distress or impairment in social, academic, or occupational functioning?
8. Can the disturbance be accounted for by Mood, Anxiety, Dissociative or Personality Disorder?

Thank you for taking the time to complete this survey instrument. Please return the completed survey to:

Gordon M. Sachs  
Chief, Training/Safety Division  
Marion County Fire-Rescue  
3230 S. E. Maricamp Road  
Ocala, FL 34471

(352) 694-6667  
(352) 694-5981 (fax)

**PLEASE RETURN COMPLETED SURVEY  
BY AUGUST 31, 1997**

Thank you!

## Appendix B

### Survey Results (General

## Applied Research Project Survey General Results

This survey was distributed to 96 National Fire Academy students in Executive Fire Officer Program required or elective classes held during July 1997. 92 surveys were returned. A tally of the *general* results (non-ADHD specific) is below. Items marked with an asterisk (\*) do not lend themselves to a total figure for a tally sheet.

### Department/Demographic Information

Where your department is located: state/prov. 35 (see below) country: USA, Canada

Profile of your department: 78 public 4 private 8 volunteer

Number of personnel: \* career \* volunteer

Fire Services provided by your department: 89 fire 76 rescue 64 haz mat

Level of EMS provided by your department: 47 ALS 52 BLS 8 None

Type of EMS provided by your department: 40 Transport 39 Non-p 12 None

Your age: \* Your sex: \* Number of years in fire/EMS field: \*

Your role in the department: 13 Chief 26 Deputy/Asst/Div. Chief 18 Other Staff Officer  
14 BC/Field Spvr 4 Line Officer 1 Line FF/EMS Prov.

Number years served as: \* Chief \* Officer \* Line FF/EMS Prov

Education: 15 Some college 38 AS/AA Deg. 28 BS/BA Deg. 11 MS/MA Deg.

How many fire/EMS-related jobs do you currently hold (primary job, instructor, consultant, etc.):  
Low = 1; High = 10; Average = 2

Average number of hours **scheduled** to work each week (all jobs):  
Low = 35; High = 100; Average = 41

Average number of hours **actually** worked each week (all jobs):  
Low = 40; High = 120; Average = 54

Number of times you have changed primary employers: Low = 0; High = 8; Average = 2

Surveys were received from students whose departments are located in the following states or provinces. The number of surveys received from each state or province is indicated.

|                   |    |
|-------------------|----|
| Alabama           | 3  |
| Arizona           |    |
| Arkansas          | 2  |
| California        | 6  |
| Colorado          | 2  |
| Connecticut       | 1  |
| Dist. of Columbia | 1  |
| Florida           | 11 |
| Georgia           | 2  |
| Hawaii            |    |
| Illinois          | 3  |
| Indiana           | 2  |
| Iowa              | 2  |
| Louisiana         |    |
| Maine             | 1  |
| Maryland          | 3  |
| Minnesota         | 1  |
| Missouri          | 1  |
| Montana           | 1  |
| Nebraska          | 1  |
| North Carolina    | 2  |
| Ohio              | 1  |
| Oklahoma          | 2  |
| Oregon            | 4  |
| Pennsylvania      | 2  |
| Tennessee         | 3  |
| Texas             | 9  |
| Utah              |    |
| Virginia          | 2  |
| Washington        | 4  |
| Wisconsin         | 1  |
| Alberta           |    |
| Ontario           | 1  |
| Unknown/Other     | 13 |

## Appendix C

Survey Results Specific to ADHD

## Applied Research Project Survey Results Specific to ADHD

This survey was distributed to 96 National Fire Academy students in Executive Fire Officer Program required or elective classes held during July 1997. 92 surveys were returned. A tally of the *ADHD-specific* results is below.

For all of the following questions, respondents were asked to check either yes or no. Only those 12 surveys meeting the ADHD criteria in DSM-IV (APA, 1996) are counted below. (See Appendix D for the DSM-IV criteria for ADHD.) Only the "yes" answers from those surveys are indicated.

### *ADHD Diagnosis*

1. Have you ever been diagnosed with Attention Deficit/Hyperactivity Disorder, Attention Deficit Disorder, or related disturbance? : 5

### *Inattention Characteristics*

2. Do you:
- a. often fail to give close attention to details, or make careless mistakes in schoolwork, work, or other activities? : 6
  - b. often have difficulty sustaining attention in tasks or activities? 6
  - c. often not seem to listen to what is being said to you? 8
  - d. often fail to follow through on instructions and fail to finish schoolwork, chores, or duties in the workplace (not due to oppositional behavior or failure to understand instructions)?
  - e. often have difficulties organizing tasks and activities?
  - f. often avoid or strongly dislike tasks (such as schoolwork or homework) that require sustained mental effort? : 6
  - g. often lose things necessary for tasks or activities (e.g., assignments pencils, books, tools, or other belongings)?
  - h. often easily distracted by extraneous stimuli?
  - often forgetful in daily activities? 2

***Hyperactivity Characteristics***

3. Do you:

- a. often fidget with hands or feet or squirm in seat? 9
- b. leave seat in classroom or in other situations in which remaining seated is expected? 9
- c. often run about or climb excessively in situations where it is inappropriate, or have feelings of restlessness? 4
- d. often have difficulty playing or engaging in leisure activities quietly? 5

***Impulsivity Characteristics***

4. Do you:

- a. often blurt out answers to questions before the questions have been completed? 9
- b. often have difficulty waiting in lines or awaiting turn in group situations? 1

***General Diagnostic Questions***

5. For those questions you answered "yes" above, did the symptoms generally begin prior to age 7? :

6. Are the symptoms present in two or more situations (e.g. at school, work, and at home)?

7. Does the disturbance cause significant distress or impairment in social, academic, or occupational functioning? :

8. Can the disturbance be accounted for by Mood, Anxiety, Dissociative or Personality Disorder? 0

## Appendix D

APA Criteria for ADHD

**American Psychiatric Association's  
Diagnostic and Statistics Manual (DSM-IV) Criteria  
for ATTENTION-DEFICIT/HYPERACTIVITY DISORDER**

Attention Deficit/Hyperactivity Disorder

A. Either 1) or (2)

- 1 Inattention: at least six of the following symptoms of inattention have persisted for at least six months to a degree that is maladaptive and inconsistent with developmental level.
  - a. often fails to give close attention to details or makes careless mistakes in schoolwork, work, or other activities.
  - b. often had difficulty sustaining attention in tasks or play activities.
  - c. often does not seem to listen to what is being said to him/her
  - d. often does not follow thru on instructions and fails to finish schoolwork, chores, or duties in the workplace (not due to oppositional behavior or failure to understand instructions).
  - e. often has difficulties organizing tasks and activities
  - f. often avoids or strongly dislikes tasks (such as schoolwork or homework) that require sustained mental effort.
  - g. often loses things necessary for tasks or activities (e.g. school assignments, pencils, books, tools, or toys).
  - h. is often easily distracted by extraneous stimuli  
  
often forgetful in daily activities
  
- 2 Hyperactivity-Impulsivity: at least four of the following symptoms of hyperactivity-impulsivity have persisted for at least six months to a degree that is maladaptive and inconsistent with developmental level.
 

hyperactivity

  - a. often fidgets with hands or feet or squirms in seat
  - b. leaves seat in classroom or in other situations in which remaining seated is expected.

- c. often runs about or climbs excessively in situations where it is inappropriate (in adolescents or adults, may be limited to subjective feelings of restlessness).
- d. often has difficulty playing or engaging in leisure activities quietly.

Impulsivity:

- e. often blurts out answers to questions before the questions have been completed.
  - f. often has difficulty waiting in lines or awaiting turn in games or group situations.
- B. Onset no later than age 7.
  - C. Symptoms must be present in two or more situations (e.g. at school, work, and at home).
  - D. The disturbance causes clinically significant distress or impairment in social, academic, or occupational functioning.
  - E. Does not occur exclusively during the course of PDD, Schizophrenia or other Psychotic Disorder, and is not better accounted for by Mood, Anxiety, Dissociative, or Personality Disorder.

Code based on type:

314.00 ADHD, Predominantly Inattentive Type: if criterion A(1) is met but not criterion A(2) for the past 6 months.

314.01 ADHD, Predominantly Hyperactive-Impulsive Type: if criterion A(2) is met but not criterion A(1) for the past 6 months.

314.02 ADHD, Combined Type: if both criteria A(1) and A(2) are met for the past 6 months.

314.9 ADHD NOS: for other disorders with prominent symptoms of attention deficit or hyperactivity-impulsivity that do not meet the criteria above.

***[NOTE: The information above is provided for informational purposes only. An accurate diagnosis is the important first step in addressing any needs; such a diagnosis can only be performed by a qualified professional who is familiar with the individual's history.]***

